REMARKS

Applicants amend claims 1, 8, 18, and 20. No new matter is added. Support for the claim amendment can be found throughout the application and at least at Page 15, lines 12-20, Figs. 6-7 and related text. Upon entry of this amendment, claims 1-20 are pending, of which claims 1, 8, 17, 18, and 20 are independent. Applicants respectfully submit that the pending claims define over the art of record.

Allowable Subject Matter

Applicants note with appreciation that the Examiner deems claims 8-16 to recite allowable subject matter. Applicants rewrite claim 8 in independent form including all of the limitations of the base claim (claim 1) and any intervening claims (claim 7). Claims 9-16 depend on claim 8. Applicants respectfully request the immediate allowance of claims 8-16.

Claim Rejection Under 35 U.S.C. §112

Claim 20 is rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Applicants amend claim 20 to clarify the substance that is being purged and how the agitating gas is controlled in response to an execution of purging. Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 20 under 35 U.S.C. §112.

Double Patenting

Claims 1, 7, and 17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/676,470. Applicants submit herewith a Terminal Disclaimer. Applicants respectfully request that the Examiner reconsider and withdraw the provisional nonstatutory obviousness-type double patenting rejection.

Claim Rejection Under 35 U.S.C. §103

Claims 1-7 and 17

Claims 1, 2, 3, 7, and 17 are rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent Application Publication No. 2003/0077488 to Yamamoto et al. (hereafter

Yamamoto '488). Claims 4, 5, and 6 are rejected under 35 U.S.C. §103(a) as being unpatentable over the Yamamoto '488 reference and further in view of United States Patent Application Publication No. 2004/0062975 to Yamamoto et al. (hereafter Yamamoto '975).

The Yamamoto '488 Reference

Applicants submit herewith a certified English translation of the priority document JP 2002-302739 filed on October 17, 2002 to perfect a priority claim. See MPEP 201.13. Applicants respectfully submit that at least claims 1-6, and 17 of the present application have support in the priority document JP 2002-302739. Applicants respectfully submit that the Yamamoto '488 reference is disqualified as a reference at least with respect to claims 1-6 and 17 because its reference date is its earliest U.S. priority date of October 23, 2002, which is after the priority date October 17, 2002 of the present application. See MPEP 706.02(f)(1).

The Yamamoto '975 Reference

Applicants submit herewith a certified English translation of the priority document JP 2003-071221 filed on March 17, 2003 to perfect a priority claim. See MPEP 201.13. Applicants respectfully submit that the pending claims have support in the priority document JP 2002-302739 filed on October 17, 2002 and/or the priority document JP 2003-071221 filed on March 17, 2003. Applicants respectfully submit that the Yamamoto '975 reference is disqualified as a reference because its reference date is its earliest U.S. priority date of October 1, 2003, which is after October 17, 2002 and March 17, 2003. See MPEP 706.02(f)(1).

As such, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 1-7 and 17 under 35 U.S.C. §103 with respect to the Yamamoto '488 reference and the Yamamoto '975 reference.

Claims 1-3, 7, and 17

Claims 1, 7, and 17 are rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent Application Publication No. 2002/0094469 to Yoshizumi et al. (hereafter Yoshizumi). Claims 2 and 3 are rejected under 35 U.S.C. §103(a) as being unpatentable over the Yoshizumi reference and further in view of United States Patent No. 6,926,987 to Blaszczyk et

al. (hereafter Blaszczyk). Applicants respectfully submit that the combination of the Yoshizumi reference and the Blaszczyk reference do not teach or suggest an agitating gas introduction inlet at an upper part of a reservoir, as required by independent claims 1 and 17.

The Yoshizumi Reference

The Yoshizumi reference teaches that hydrogen-off gas and oxygen-off gas are mixed before being discharged to the atmosphere. See Paragraph 12. The Yoshizumi reference merely teaches that a mixing portion 411 is where passage 407 that carries hydrogen-off gas and passage 503 that carries oxygen-off gas are joined. See Fig. 1 and paragraph 41. The Yoshizumi reference does not teach or suggest an agitating gas introduction inlet at an upper part of a reservoir. The Examiner alleges that the rearranging of parts of an invention involves only routine skill in the art and concludes that it is obvious to put the agitating gas inlet at an upper part of the reservoir.

Applicants respectfully submit that the placement of the agitating gas introduction inlet is not a mere rearranging of parts because in order to discharge hydrogen intermittently supplied from the fuel cell by the reservoir without having the hydrogen remaining in the reservoir, it is necessary to supply the agitating gas from the upper part of the reservoir where hydrogen is apt to stay.

Accordingly, Applicants respectfully submit that the Yoshizumi reference does not teach or suggest an agitating gas introduction inlet at an upper part of a reservoir, as required by independent claims 1 and 17. Applicants respectfully submit that the Blaszczyk reference fails to cure the deficiency of the Yoshizumi reference.

The Blaszczyk Reference

The Blaszczyk reference is cited by the Examiner to show that cathode gas may be used to dilute purged hydrogen gas. See Fig. 2 and Col. 3, lines 11-14. However, the Blaszczyk reference also does not teach or suggest an agitating gas introduction inlet provided at an upper part of a reservoir, as required by independent claims 1 and 17.

Accordingly, the combination of the Yoshizumi reference and the Blaszczyk reference do not teach or suggest an agitating gas introduction inlet provided at an upper part of a reservoir,

as required by independent claims 1 and 17. Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 1 and 17.

Applicants note that dependent claims 2-3 and 7 also recite patentable subject matter. As such, for this and the reasons set forth above, Applicants respectfully submit that the dependent claims 2-3 and 7 also define over the art of record.

Claims 18-20

Claims 18, 19, and 20 are rejected under 35 U.S.C. §103(a) as being unpatentable over the Yoshizumi reference in view of Japanese Patent Application Publication 60-207255 (hereafter JP'255). Applicants respectfully submit that the combination of the Yoshizumi reference and the JP'255 reference do not teach or suggest an adjustment valve for adjusting an amount of agitating gas supplied to the reservoir, as recited in independent claims 18 and 20. The combination of the reference also do not teach or suggest a controller for adjusting the adjustment valve based on a detection signal from the hydrogen concentration detector, as required by independent claim 18. The combination of the references also do not teach or suggest the limitation that an introduction of agitating gas is controlled in response to a hydrogen concentration of the hydrogen gas retained in the reservoir when an execution of purging the hydrogen gas from the fuel cell is not detected, as required by amended claim 20.

The Yoshizumi Reference

The Examiner note that the Yoshizumi reference does not teach or suggest "the controller, adjustment valve, and hydrogen concentration detector used to control the amount the agitating gas or cathode exhaust gas amount introduced the hydrogen diluter". See Office Action, item 16. Applicants respectfully submit that the JP'255 reference does not cure the deficiency of the Yoshizumi reference.

The JP'255 Reference

The JP'255 reference teaches that the amount of gas supplied to the fuel cell depends on a concentration of gas discharged from the fuel cell. In contrast, the present invention is concerned with the amount of agitating gas *supplied to the reservoir*, and not the fuel cell. Specifically, the present invention uses a concentration of hydrogen gas purged from the fuel

cell to determine a flow rate of an agitating gas that is *fed into a reservoir* for diluting the purged hydrogen gas.

Accordingly, the JP'255 reference does not teach or suggest the limitation of an adjustment valve for adjusting an amount of agitating gas supplied to the reservoir, as recited in amended claims 18 and 20. The JP'255 reference also does not teach or suggest the limitation of a controller for adjusting the adjustment valve based on a detection signal from the hydrogen concentration detector, as required by amended claim 18, or the limitation that an introduction of agitating gas is controlled in response to a hydrogen concentration of the hydrogen gas retained in the reservoir when an execution of purging the hydrogen gas from the fuel cell is not detected, as required by amended claim 20.

Applicants respectfully request that the Examiner reconsider and withdraw the rejection of independent claims 18 and 20. Applicants note that dependent claim 19 also recites patentable subject matter. As such, for this and the reasons set forth above, Applicants respectfully submit that dependent claim 19 also defines over the art of record.

CONCLUSION

In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Applicants submit herewith a petition for one-month extension of time. Applicants believe no other fee is due with this statement. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. IIW-034 from which the undersigned is authorized to draw.

Dated: March 22, 2007

Respectfully submitted,

By _____

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